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PATENT
Customer No. 22,852
Attorney Docket No. **08350.0663-00**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)	
	)	
Kazunori YOSHINO	)	Group Art Unit: 3745
	)	
Application No.: 10/029,290	)	Examiner: Frank D. Lopez
	)	
Filed: December 28, 2001	)	Confirmation No.: 3082
	)	
For: HYDRAULIC CONTROL SYSTEM FOR REDUCING MOTOR CAVITATION	)	

Commissioner for Patents
Washington, DC 20231

Sir:

REPLY BRIEF UNDER 37 C.F.R. § 41.41

Pursuant to 37 C.F.R. § 1.193, Appellant submits this Reply Brief under 37 C.F.R. § 41.41 to the Board of Patent Appeals and Interferences ("the Board"), from the May 30, 2006, Examiner's Answer in this case.

I. Grounds of Rejection to be Reviewed on Appeal

In the Examiner's Answer, the Examiner asserts that "[t]he following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief[:] [c]laims 5, 7, 9, 10, 12-14; and 21 are rejected under 35 U.S.C. § 103 as being unpatentable over Yoshimatsu (5,063,742) in view of Krusche and Yoshimatsu (5,062,266), as applied to claim 4 and 15, respectively, above, and further in view of Chung and a further teaching of Krusche." Examiner's Answer at 2-3. The Examiner further asserts that "Appellant's arguments concerning Chung and a further teaching of Krusche are only directed to the

limitations of claims 1, 4, 15 and 16, and therefore, do not appear to be presented for review in the appellant's brief." Id. at 3.

Appellant respectfully submits that the Appeal Brief filed November 22, 2005, lists the 35 U.S.C. § 103(a) claim rejection based on Yoshimatsu '742 in view of Krusche and Yoshimatsu '266, and further in view of U.S. Patent No. 5,673,605 to Chung ("Chung") and "a further teaching of" Krusche as a ground of rejection to be reviewed on appeal. In particular, Appellant's Appeal Brief lists the grounds of rejection under appeal as follows:

> Claims 1, 4, 15, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,063,742 to Yoshimatsu ("Yoshimatsu '742") in view of U.S. Patent No. 4,665,699 to Krusche ("Krusche") and U.S. Patent No. 5,062,266 to Yoshimatsu ("Yoshimatsu '266").
>
> Claims 5, 7, 9, 10, 12-14, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshimatsu '742 in view of Krusche and Yoshimatsu '266, and further in view of U.S. Patent No. 5,673,605 to Chung ("Chung") and "a further teaching of" Krusche.

Appeal Brief at 8. Further, the Appeal Brief requests reversal of each of those rejections and provides remarks supporting Appellant's request for reversal of the § 103(a) claim rejection based on the Examiner's proposed, hypothetical combination of Yoshimatsu '742, Krusche, Yoshimatsu '266, Chung, and "a further teaching of" Krusche. Id. at 17-18. For at least these reasons, Appellant respectfully submits that the Appeal Brief presents that rejection for review. Also, for at least the reasons outlined in Appellant's Appeal Brief,

Appellant respectfully requests review and reversal of the rejection of claims 5, 7, 9, 10, 12-14, and 21 under 35 U.S.C. § 103(a) based on Yoshimatsu '742, Krusche, and Yoshimatsu '266 along with Chung and "a further teaching of" Krusche.

II. Rejection under 35 U.S.C. § 103(a) based on Yoshimatsu '742 in combination with Krusche and Yoshimatsu '266

In the Examiner's Answer, the Examiner asserts that Yoshimatsu '742 discloses "a pilot pump (21, shown in fig 1, and schematically connected to pilot valve 24, in e.g. fig 3) provides fluid across a pilot relief valve (23, fig 1) disposed in a second flow line, connected to tank (15)" Examiner's Answer at 4. The Examiner concedes that Yoshimatsu '742 does not disclose "that the second flow line is connected to the motor return flow line, in parallel to the first flow line" Id. The Examiner asserts, however, that Krusche discloses "a pilot pump (25, fig 2) provid[ing] fluid across a pilot relief valve (e.g. 196, fig 3) disposed in a second flow line (194, 200), connected to the tank; that the second flow line is connected to the motor return flow line (see fig 3)." Id. The Examiner thereafter concludes that "[s]ince the connection between the pilot relief valve and the tank of Yoshimatsu (5,063,742) and Krusche are [allegedly] functionally equivalent; it would have been obvious . . . to connect the second flow line of Yoshimatsu (5,063,742) to the motor return flow line, as taught by Krusche, as a matter of engineering expediency." Id. at 4-5. In response to Appellant's remarks in the Appeal Brief, the Examiner alleges that the connection between the pilot relief valve and the tank of Yoshimatsu '742 and the connection between the pilot relief valve and the motor return flow line of Krusche are functionally equivalent because "both perform the same function of limiting the pilot pressure to be less than a certain value" Id. at 7.

Appellant respectfully traverses the Examiner's "functional equivalent" allegation. First, the Examiner acknowledges that the alleged "second flow line" of Yoshimatsu '742 and the alleged "second flow line" of Krusche are connected to different portions of their respective hydraulic circuits. Yet the Examiner bases his "functional equivalent" allegation solely on the basis of what the alleged second flow lines have in common, without addressing the fact that the two alleged "second flow lines" may serve entirely different and/or additional functions based on the fact that they are integrated into their respective hydraulic circuits in a different manner. In other words, the Examiner alleges that the disclosures in Yoshimatsu '742 and Krusche relating to the connection between pilot relief valves and tanks are purportedly "functional[ly] equivalent" merely because they might possibly serve one function that may be similar.

The Examiner's "functional equivalent" allegation is flawed, as evidenced, for example, by the differences between the connections of the pilot relief valves disclosed in the Yoshimatsu '742 and Krusche references. In fact, by virtue of the alleged "second flow line" of Krusche being connected to the motor return flow line instead of directly to the tank, as disclosed in Yoshimatsu '742, the alleged "second flow line" of Krusche appears to quite possibly function in an entirely different manner than the alleged "second flow line" of Yoshimatsu '742.

In addition, Krusche fails to mention any reason to connect the alleged "second flow line" to the motor return flow line instead of directly to the tank, as is disclosed in Yoshimatsu '742. In an apparent attempt to overcome the fact that Krusche does not mention any reason for connecting the alleged "second flow line" to the motor return flow line instead of directly to the tank, the Examiner alleges that "[i]n [Krusche's] case, . . . it is simpler to run one line to the tank, after joining the second flow line with the motor return

line." Examiner's Answer at 7. Appellant respectfully notes that the references themselves do not support the Examiner's "simpler" theory. Furthermore, since the alleged "second flow line" of Krusche is integrated into a hydraulic system and is not connected directly to the tank as in Yoshimatsu '742, operation of the alleged "second flow line" may impact the operation of other portions of the Krusche hydraulic system, in contrast to Yoshimatsu '742's alleged "second flow line," which, by virtue of being connected directly to the tank, will not effect the operation of other portions of the Yoshimatsu '742 hydraulic system. Thus, it may not be "simpler" to connect the alleged "second flow line" of Yoshimatsu '742 to the motor return flow line, since such connection may necessitate a more complex control of the Yoshimatsu '742 hydraulic system.

For example, by virtue of Appellant's second flow line being connected to the motor return flow line, Appellant's system is more complex than if the second flow line were connected directly to the tank, and operation of the pilot relief valve may necessitate the use of a more complex control scheme in order to operate properly in Appellant's hydraulic system. In fact, Appellant's second flow line is configured to provide make-up fluid to a motor, a function of the pilot pump and pilot relief valve that is not disclosed in either Yoshimatsu '742 or Krusche.

For at least the above-outlined reasons, Appellant respectfully submits that the connection between the pilot relief valve directly to the tank disclosed in Yoshimatsu '742 and the connection between the pilot relief valve and the motor return flow line disclosed in Krusche are not functional equivalent, regardless of the Examiner's allegations to the contrary, and further, there is no suggestion or motivation to make the Examiner's proposed, hypothetical modification to Yoshimatsu '742's disclosure based on Krusche.

III. Conclusion

For the reasons presented in the Appeal Brief filed November 22, 2005, and the reasons outlined above, the Board is kindly requested to reverse all of the outstanding claim rejections, so that all of pending claims 1, 4, 5, 7, 9, 10, 12-16, and 21 may be allowed.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this Reply Brief, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: July 31, 2006

By: _____
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